Castlemaine Naturalist

September 2023

Vol. 48.8 #523

Monthly newsletter of the Castlemaine Field Naturalists Club Inc.

Phabalium festivum, Whipstick.
Photo: Noel Young

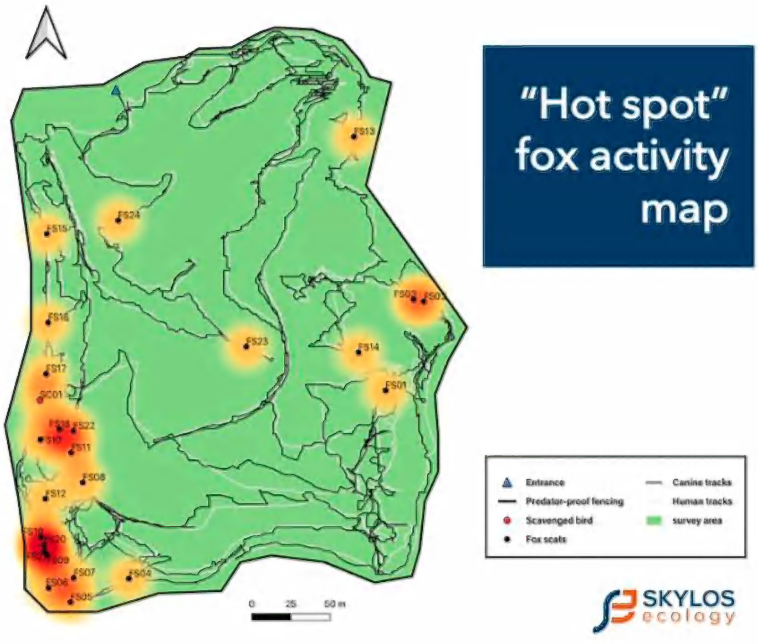
August Meeting Report
"The role of detection dogs in conservation"

Our guest speakers for the August Monthly Meeting were Tracy Lyten and Fiona Jackson, co-founders of Skylos Ecology[1]. Tracy and Fiona train and work with detection dogs for the collection of environmental data and to provide adaptive detection solutions for environmental projects. Tracy has a more managerial background, while Fiona has a Masters degree in International Animal Welfare, Ethics and Law (University of Edinburgh). Both ladies and their team have extensive experience as dog handlers and their use in conservation.

They currently have six working dogs – three of which are rescue dogs and three grown from pups. The breeds include Border Collies, Kelpies and a Spaniel and generally are considered as 'air scenting' dogs who do not always have their noses to the ground. With a sense of smell 10,000-100,000 greater than that of humans they can find what other methods such as drones or human inspectors cannot (too small, too similar, too cryptic) and can be paired with other monitoring methods. The dogs are trained to specialise to scent for one or several of the 10+ target species and have accuracy rates between 80-100%. Native target species include the Powerful Owl, Tiger Quoll, Long-nosed Potoroo, Koala and Kowari[2]. Invasive species include Fox, Feral Cat, Alligator weed (*Alternanthera philoxeroides*) and Common Cordgrass (*Spartina anglica*). The dogs are trained and assessed to safely interact with livestock, wildlife, other domestic animals, people and vehicles.

Dog being trained on the scent of Powerful Owl

When active in the field, the dogs are fitted with GPS and GIS (Geographic Information System) trackers to collect raw data which can be used to create maps with different data layers. Analysis may determine what needs to be done further. The dogs will survey a site 90° to the wind to ensure that all scents are detected. They are trained to indicate a find by sitting at a find. An example of this method was shown where 'Jimmy' was used to survey the enclosed site of Wildlife Wonders, Apollo Bay for fox scats and dens before the release of native species into the enclosure.



They have the proven power to detect plants that are dormant, underwater or underground. Border collie 'Raasay' has assisted Melbourne Water in locating Common Cordgrass in the tidal estuaries of Westernport Catchment. 'Oakley' is a specialist in locating the invasive Alligator weed both in Victoria and ACT, even identifying a sliver of Alligator weed too small for the human eye to detect. Trained detection dogs are also used to detect the presence of koalas for the forest industry. When the dogs indicate that koalas are present, the harvesting regime is changed.

For more than a decade, detections dogs have been used to detect and gather data on bat and bird kill at wind turbine farms. The dogs can detect both bird and several bat species within large survey areas with greater efficiency (96% of bats and 90% of small birds) compared to humans – 6% and 30% respectively. Supported by strong international data, the data collected and actions taken have shown that 'curtailment', where the wind speed before the turbines cut-in is increased from 3.0 to 4.5ms^{-1}, during certain times of the year, can significantly reduce bat fatalities by 54% with marginal annual power and revenue loss. These data have been published[3].

Team safety is paramount. The training of the dogs also includes emergency stops and recalls in the field e.g. if snakes are present, poison baits have been laid or other threats.

Detection dog wearing GPS tracker and indicating a find of a dead bat.

Using well trained detection dogs means minimal environmental impact. The dogs need high drive but also 'manners' in the field. Appropriate training, independent assessment for detectability and safety is ongoing.

[1] Skylos Ecology is a member of Australasian Conservation Dog Network (ACDN).

[2] Editor note: The Kowari (*Dasyuroides byrnie*) is also known as a Brush-tailed Marsupial Rat or Bushy-tailed Marsupial Rat. It is a small marsupial carnivore that lives in shallow burrows on the open gibber plains.

[3]https://onlinelibrary.wiley.com/doi/10.1111/aec.13220?fbclid=IwAR3TPqp5R6MO4LvF_TViAgN1ey_TIbFvXFnsbqfBOTX2BnVsJXFYe_xE0tg

Jill Williams

August Excursion Report
"Wandering in the Whipstick"

Our excursion on Saturday 12th August was to the Shadbolt Picnic Area in the Whipstick Forest north of Bendigo – a 50 minute drive from Castlemaine. Some of us enjoyed watching and listening for birds while eating our picnic lunches, while others arrived in time to start a wander around the Flagstaff Hill loop track. Most of the birds listed below were identified by their calls.

Parks Vic's website states that "*As well as being a historic gold rush landscape, this was also the site of the first eucalyptus distillery in the area, owned by Jack Shadbolt, which supplied eucalyptus oil to the Red Cross in World War One. A few non-native plants at the start of the Flagstaff Hill track are all that remains of the Shadbolt's family garden*". These non-native plants include large, very evident clumps of agave and wormwood.

Close to the start of the track Russel Stanley spotted Dwarf Greenhood orchids (see separate article on this species by Russell in this newsletter). The track continues through striking Ironbark woodland. We enjoyed some early Spring wildflowers, with some interesting plants in flower that we did not recognise at the time including Dainty Phebalium, *Phebalium festivum* (see photo page 1), Clasping Goodenia, *Goodenia benthamiana* and Lunch Clockflower, *Moraea fugacissima* – a South African exotic. Ironbarks are replaced by dense mallee woodland as the track climbs up Flagstaff Hill on quartz gravel soils. Blue Fingers, *Cyanicula caerulea* were found in the gravelly slopes. From the viewing platform at the summit of Flagstaff Hill, the overall flatness of the plains north of Bendigo is clear.

Ironbark woodland, Whipstick Forest.
Photo: Peter Turner

Rosy Heath-myrtle, *Euryomyrtus ramosissima*
Photo: Cathrine Harboe-Ree

Descending past old diggings, the mallee scrub gives way to Ironbarks and some Box trees. Rosy Heath-myrtle, *Euryomyrtus ramosissima* coloured the low undergrowth bright pink. The Whipstick is famous for Springtime displays of Golden Pennants, *Glischrocaryon* with grey-green reed-like leaves – but no signs of flowering so far. There were still some fungi to see, including Cinnabar Polypore, *Pycnoporus cinnabarinus* and White Punk, *Laetiporus portentosus*, as well as a praying mantis egg case.

We arrived back at the picnic area in time for a cuppa after an enjoyable wander through an area interestingly different from our local wildflower woodlands around Castlemaine.

Peter Turner and Cathrine Harboe-Ree

Gorse Bitter-pea, *Daviesia ulicifolia*
Photo: Noel Young

Blue Fingers, *Cyanicula caerulea*. Photo: Noel Young

Bird list for Whipstick Excursion by Noel Young

Olive-backed Oriole	Weebill	Superb Fairy-wren
White-winged Chough	Grey Fantail	Yellow-faced Honeyeater
White-eared Honeyeater	Galah	Magpie
Spotted Pardalote	Red Wattlebird	Little Raven
Fan-tailed Cuckoo	Crimson Rosella	

Plant List for Whipstick Excursion by Peter Turner

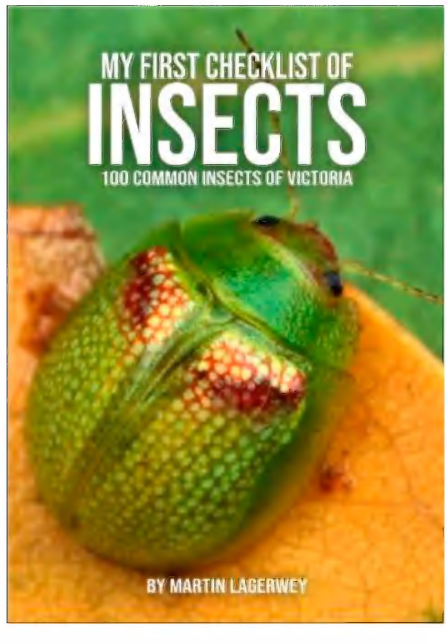
Gold-dust Wattle, *Acacia acinacea*
Whirrakee Wattle, *A. williamsonii*
Gorse Bitter-pea, *Daviesia ulicifolia*
Fairy Waxflower, *Philotheca verrucosa*
Dwarf Greenhood, *Pterostylis nana*†
Green Mallee, *Eucalyptus viridis*
Rosy Heath-myrtle, *Euryomyrtus ramosissima*
Fringed Heath-myrtle, *Micromyrtus ciliata*
Golden Wattle, *A. pycnantha*
Sticky Everlasting, *Xerochrysum viscosum*
Ploughshare Wattle, *A. gunnii*
*Swan Greenhood, *P. cycnocephala* *OR* Midget Greenhood, *P. mutica*
Bushy Needlewood, *Hakea decurrens*
Downy Grevillea, *G. alpina*
Small Crowea, *Crowea exalata*
Blue Fingers, *Cyanicula caerulea*
Dainty Phebalium, *Phebalium festivum*
Cypress Daisybush, *Olearia teretifolia*
Clasping Goodenia, *Goodenia benthamiana*
*Cherry Ballart, *Exocarpos cupressiformis*
*Red Ironbark, *E. tricarpa*
*Twiggy Lignum, Muehlenbeckia diclina
*Golden Pennants *Glischrocaryon*
**Lunch Clockflower, *Moraea fugacissima* (South African)

† See following article by Russell Stanley.
* = not in flower; ** = Exotic

New Insect Book for Children

The Entomological Society of Victoria has recently published "My First Checklist of Insects: 100 Common Insects of Victoria", written by councillor Martin Lagerwey. While adults will appreciate this book for identification, the book is written with children in mind and has text appropriate for 7+ years to read alone. The book has 100 amazing insect photographs and will spark the curiosity of young minds with the world of insects.

The book is available for purchase at the Ent. Soc. Vic. online store



Dwarf Greenhood Orchids / Snail Orchids

Russell Stanley

The Dwarf Greenhood Orchids (or, as they are more commonly known throughout southern Australia, Snail Orchids) are perhaps one of the most common small orchids encountered in our remnant bushland during winter and early spring. While only small, usually 5cm to 20cm tall and with flowers little more than 1cm in length, they can form massive colonies of many hundreds of plants, mainly through vegetative reproduction.

All Victorian Snail Orchids have long been lumped into a species named *Pterostylis nana*. This was the scientific name first given to Snail Orchids in Northern Tasmania in 1810. This scientific name was then given to these types of orchids throughout mainland Australia.

A key aspect of the description of *Pterostylis nana* based on the original Tasmanian specimens and populations is that the **stems of plants are smooth or slightly roughened**.

In Western Australia there are now at least 33 accepted species of Snail Orchid, with at least 28 of them named. Of these the most common and widespread species is *Pterostylis setulosa*, the Hairy-Stemmed Snail Orchid. This species has been recognised in W.A. for many years but was only named in 2019. *Pterostylis setulosa* is mostly found in inland locations and is **characterised by its hairy stem**. South Australia has also adopted the name *Pterostylis setulosa* (*Diplodium setulosum*) for its most widespread and common Snail Orchid (which also displays a hairy stem), while the smooth-stemmed *Pterostylis nana* is confined to the far south-east of the state.

Close examination of Snail Orchids in our district (and much of inland Victoria where I've encountered and photographed Snail Orchids) shows that **stems are moderately hairy to very hairy**. On this basis I would suggest that they are probably the same species that occurs in S.A. and W.A. See my photos below:

This leaves the quandary of how to treat Snail Orchids in Victoria. Should the taxon *Pterostylis setulosa* be adopted and applied to these hairy-stemmed populations or should we broaden the description of *Pterostylis nana* to incorporate both smooth and hairy stemmed plants? The latter position is currently adopted in most Victorian texts on the subject but is inconsistent with other southern states. I'm not a fan of the notion that species 'cease to exist' once you cross a state border, so will probably treat our local snails as *Pterostylis setulosa* until this situation is resolved.

References: A Complete Guide to Native Orchids of Australia – David L Jones 2021; The Complete Orchids of Western Australia Vol.2 – Andrew Brown 2022; Native Orchids of South Australia a Field Guide – June Niejalke & Robert Bates 2022; Guide to Native Orchids of Victoria – Gary N Backhouse 2023.

Birds of Sutton Grange

Nigel and Ann Harland's Property Bird List

For several years, Nigel has submitted a monthly bird list from his property for the Castlemaine Naturalist, commenting on interesting arrivals or observations. He now sends us the total bird list for his and Ann's property as a final contribution – an impressive 75 species! We thank Nigel for his interesting observations and hope that these have inspired others to similarly monitor their own local bird communities.

Willie Wagtail	Galah	Australian Magpie
Sulphur-crested Cockatoo	Black-faced Cuckooshrike	White-throated Treecreeper
Little Eagle	Brown Falcon	Wedge-tailed Eagle
Laughing Kookaburra	Crimson Rosella	Eastern Rosella
Restless Flycatcher	Yellow-tailed Thornbill	Buff-rumped Thornbill
Brown Thornbill	Superb Fairy-wren	Red-browed Finch
Horsefield's Bronze Cuckoo	Brown-headed Honeyeater	White-plumed Honeyeater
White-eared Honeyeater	Yellow-tufted Honeyeater	Yellow-faced Honeyeater
Silvereye	Golden Whistler	Striated Pardalote
Whistling Eagle	Masked Lapwing	Flame Robin
Scarlet Robin	Australian Goshawk	Spotted Harrier
White-necked Heron	Black Cormorant	Long-billed Corella
Straw-necked Ibis	Welcome Swallow	Varied Sitella
White-naped Honeyeater	White-browed Scrubwren	Tawny Frogmouth
Southern Boobook	Spotted Pardalote	European Goldfinch
House Sparrow	Grey Fantail	Grey Currawong
Fan-tailed Cuckoo	Pallid Cuckoo	Noisy Friarbird
Peregrine Falcon	Marsh Harrier	Spine-tailed Swift
Grey Shrike-thrush	Royal Spoonbill	White-faced Heron
Rufous Whistler	Rainbow Bee-eater	Australian Raven
White-winged Chough	Australian Hobby	Australian Wood Duck
Pacific Black Duck	Little Raven	Common Bronzewing
Peaceful Dove	Striated Thornbill	Yellow Thornbill
Olive-backed Oriole	Eastern Spinebill	Fuscous Honeyeater
Common Myna	Black-eared Cuckoo	Red Wattlebird

Observations

April Newton – King Parrot

April observed a female King Parrot in a friend's backyard in Castlemaine in early August. The parrot was flying around quite low, being bothered by the wattlebirds and rosellas, but eventually seemed happy amongst the mistletoe.

Euan Moore notes: ALA shows about a dozen records around Castlemaine-Chewton-Harcourt over the past 50 yrs. Since this area does not really provide suitable habitat for this parrot, they may be just passing through or aviary escapees.

Peter Turner - Centre Track, Walmer, 3 August

Ploughshare Wattle
(*Acacia gunii*)

Gorse Bitter-pea
(*Daviesia ulicifolia*)

Common Hovea
(*Hovea heterophylla*)

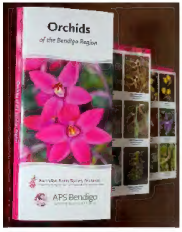
Grey Everlasting
(*Ozothamnus obcordatus*)

Downy Grevillea
(*Grevillea alpina*)

White Marianth
(*Rhytidosporum procumbens*)

New "Orchids of the Bendigo Region" Brochure

The Australian Plants Society (Victoria) and APS Bendigo have funded a new guide to the 48 orchids most likely to be found in Greater Bendigo's National, State and Regional Parks and Conservation and Flora Reserves. However, most can also be found in the Castlemaine district.



The easy-to-use, fold-out glossy brochure was compiled by Pam Sheean. The beautiful photographs by Joy Clusker, Rod Orr and Pam Sheean provide a guide to orchid identification as well as an increased awareness of the amazing diversity of orchids. Flowering times are also shown for each orchid.

An important section in the brochure is devoted to orchid conservation and how we can all help prevent further extinctions by protecting their habitat. The brochure can be obtained from Stoneman's Bookshop, the Information Centre and ASQ Castlemaine.

COMING EVENTS

MEETING: Friday 8th September, 7.30pm, Uniting Church Fellowship Room, Lyttleton St

Speaker: Jane Rusden "Birding in SA Desert country".

Combined Castlemaine Field Naturalist and BirdLife Castlemaine District annual presentation

Going bush, watching and photographing birds and then making art about them, is Jane Rusden's idea of the perfect day. Jane will talk about her time in remote desert landscapes, namely Nature Foundation's Witchelina Reserve in outback SA, studying and painting birds and their habitats. She will show examples of her beautiful work and explain how she gets to know the birds she paints on watercolour paper.

Zoom option: For this special combined Birdlife meeting, there will also be the option to join by Zoom if you cannot join us at the meeting room. For this, please email Peter Turner to register, and you will then receive the link for joining the meeting by Zoom.

Observations: Members and visitors are invited to share their interesting observations at the meeting. Please email any photos to illustrate your report as JPEG file(s) to Euan Moore by noon on the day of the meeting.

EXCURSIONS: Saturday 9th/Sunday 10th September

Special double field trip near Ballarat

- **Saturday 9th** - meet at 3pm at a private fenced wildlife sanctuary at Berringa (40mins SW Ballarat) for a tour of the sanctuary, then an early picnic tea before viewing grazing free-roaming nocturnal animals (Rufous Bettongs, Bandicoots etc) until about 8pm.
- **Sunday 10th** – meet at 9.30am for an orchid/bird walk in Clarkesdale Bird Sanctuary (360 Linton-Piggoreet Rd, near Linton) with Emily Noble, Secretary Ballarat FNC. As we search for beautiful native orchids, we will enjoy the wonderful array of springtime birdlife at the sanctuary. We will finish with a picnic lunch.

Bring: Picnic tea, chairs and torch for Saturday, picnic lunch for Sunday, water, snacks, sturdy shoes.

Boot hygiene: Please clean your boots thoroughly before leaving home. On arrival at the excursion sites, we will spray the soles of our boots with Phytoclean.

Register: Because we need to know the number attending prior to this event we ask that participants please register to let us know by email on castlemainefnc@hotmail.com if you are planning to attend these activities. Please provide your name, number attending, contact phone, where you will be staying and indicate whether you will be attending on both days, Saturday only or Sunday only. **We will send details of meeting places and additional information directly to those who have registered.** We will also assist in arranging car-pooling if you are interested.

Accommodation Saturday 9th September: Participants must make their own accommodation bookings for Saturday night. Attendees can either camp (suitable for caravans) at the Clarkesdale Bird Sanctuary (bookings required as below) or stay in nearby accommodation (see below).

- **Camping at Clarkesdale Bird Sanctuary** (about 20mins drive from Berringa) – Amenities: toilets and shower, unpowered sites but power points available for charging phones etc., drinking water and hot water. Please book directly with the sanctuary coordinator $15 per adult + $5 per night. Payment via EFT:, Ref: Clarkesdale + your name. Enquiries: Emily.

If you plan to camp at Clarkesdale, we suggest that you first drive to Clarkesdale and set up camp early Saturday afternoon before driving to the wildlife sanctuary at Berringa. This will avoid the need to set up camp in the dark.

- **Alternative accommodation suggestions:** There are country hotels offering accommodation at Linton, Smythesdale and Snake Valley. Alternatively, there are a number of motels and hotels in the south-western suburbs of Ballarat. Most of these options will be within 45mins travel from our two activity sites.

Disclaimer: The opinions expressed in this newsletter are those of the contributors and not necessarily those of the club

Castlemaine Field Naturalists Club
PROGRAM

Monthly meetings are being held in person again at the Uniting Church Hall, Lyttleton Street, Castlemaine, commencing at 7.30pm. However, for the September meeting there will also be the option to join by Zoom if you cannot join us at the meeting room. For this, please email Peter Turner to register and you will then receive the link for joining the meeting by Zoom.

Members and visitors are invited to share their interesting observations at the meeting. Please email any photos to illustrate your report as JPEG file(s) to Euan Moore by noon on the day of the meeting.

Excursions (Saturday following the monthly meeting) leave from the car park opposite the Castle Motel, Duke Street at 1.30pm unless stated otherwise.

See 'Coming Events' pages for more details about September events.

Fri September 8, Meeting 7.30pm (Uniting Church Hall). Combined with Birdlife Castlemaine. Speaker: Jane Rusden "Birding in SA Desert country".

Sat/Sun September 9/10, Excursions near Ballarat – private wildlife sanctuary (Sat) and Clarkesdale wildflowers and birds with Emily Noble (Sun); Clarkesdale camping option (see 'Coming Events' page for details).

Fri October 13, Meeting 7.30pm (UCH). Speaker: Kailee Savoia (Parks Vic) "Grampians/Gariwerd Ark – Landscape scale predator control".

Sat October 14, Excursion 1.30pm. Bev Phillips (Maldon Urban Landcare) "Pre-1852 Eucalypts around Maldon – their importance and protection"

VISITORS ARE WELCOME AT CLUB ACTIVITIES

Castlemaine Naturalist - email newsletter material to: newsletter.cfnc@gmail.com
* Deadline for the October edition: **29th September**

Club website (Webmaster: Ron Wescott) – www.castlemainefieldnaturalists.org.au

Subscriptions (Membership forms on CFNC website)
Ordinary membership: Single $35, Family $50
Pensioner or student: Single $25, Family $30
Subscription includes the monthly newsletter, Castlemaine Naturalist.

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